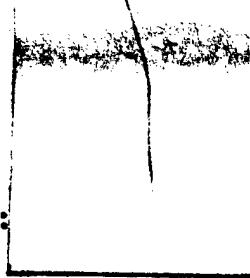


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SOVIET SCIENTIFIC PERSONALITIES

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## SOVIET SCIENTIFIC PERSONALITIES

The following are translations of biographical sketches taken from various sources identified below.

LEV ALEKSANDROVICH MOLCHANOV  
(on his 80th birthday)  
from Meteor. i Gidro (Meteorology and Hydrology), No 1, 1959.

The scientific personnel of Tashkent Agricultural Institute (TashSKhI) and a number of other higher educational institutions and scientific establishments have observed the 80th birthday and 55th anniversary of the public, scientific and pedagogical activity of the director of the chair of physics and agricultural meteorology, the distinguished scientific worker of the Uzbek SSR, Professor Lev Aleksandrovich Molchanov, Doctor of Geographical Sciences.

Lev Aleksandrovich was born on 4 August 1878. In 1897 he graduated from preparatory school in Simferopol' and was subsequently admitted to the physico-mathematics faculty of Moscow University, from which he graduated with a first category diploma.

The first undergraduate work of Lev Aleksandrovich dealt with the ornithology of the Crimea. At that time, carrying out a task of the Moscow Society of Natural Experimentalists, he participated in the expedition to the Yenisey. In succeeding years L.A. Molchanov traveled on many occasions and participated in various expeditions.

The first of Lev Aleksandrovich's studies on the geography and climate of Central Asia were conducted in the period from 1911 to 1914. At that time, he published the following articles: "On the continuing rise in the level of the Aral Sea" (1911), "Trip to the Amu-Darya delta" (1912), "Inundation of the Aybugir hollow by the Aral Sea" (1912), and a number of others.

Immediately upon graduation from the university, Lev Aleksandrovich began to work as a teacher in secondary educational institutions until 1918 and thereafter he transferred his activities to Tambov and Saratov universities.

In 1921, he was appointed a professor at Central Asia University where he occupied the chair of geography until 1933. From 1933 to the present time he has been holding the chair of physics and agricultural meteorology at Tashkent Agricultural Institute.

In 1938 L.A. Molchanov was awarded the degree of Doctor of Geographical Sciences without submission of a dissertation and the title of professor of physics and agrometeorology.

At that time, L.A. Molchanov was pursuing, concurrently with his pedagogical activity, basic scientific research at Central Asian Meteorological Institute, where he directed work on the study of the climate of Central Asia.

It can be said without exaggeration that active work on the study of the climate of Central Asia began in the city of Tashkent with the arrival of L.A. Molchanov.

Of all the research done on the climate of Central Asia, a great number of climatic outlines of individual river basins and health resort sites have been written by Lev Aleksandrovich. He also has written monographs on the climate of individual republics and regions of Central Asia. The latter include, for example, "The Climate of Uzbekistan" (1934), "Climatic Areas of Central Asia" (co-author, 1926), "Climate of Tadzhikistan" (1925), "Climate of Turkmenistan" (1929), "Climatic Areas of the Warmest Regions of Central Asia" (1935), "Climate of the Southern Portion of Central Asia" (co-author, 1937) and a number of others.

His studies on the climatic areas of the Central Asian republics are of exceptional significance for the development of cotton-growing and other agricultural branches.

In describing the scientific activities of Lev Aleksandrovich, we cannot confine ourselves to a mere mention of climatological studies although they occupy a predominant place in his work. Among his scientific investigations, we also find articles on questions of agro-meteorology, on methodology of taking meteorological observations on expeditions. A number of lakes are described in several of his articles and various books. The deep interest in ornithology which took root in L.A. Molchanov in his student years has been maintained up to the present time. Various questions of ornithology and bird-hunting constantly occupy his attention. He has published a number of articles and excellently written books on these matters, for example, "Bird-Hunting and Game Birds of Central Asia" (1933).

Lev Aleksandrovich devotes a great deal of effort and energy to the training of young, highly qualified specialists. Several thousands of students have attended his courses during the long period of his pedagogical activity. It may be said

that the majority of professors and instructors of the Tashkent Agricultural Institute have, at one time or another, attended the courses of Lev Aleksandrovich on physics, agrometeorology and other disciplines.

In addition to his intensive scientific and pedagogical activity, Lev Aleksandrovich participates very actively in public affairs. He has served for a long time as president of the Uzbek affiliate of the All-Union Geographical Society, as a board member of the Home for Scientists and he participates in the activities of the Hunter's Association.

L.A. Molchanov's long years of work are highly appreciated by the government -- he has been awarded the Order of Lenin and the Order of Labor Red Banner.

In expressing the sentiment of his many scientific collaborators and all his pupils, we extend to Lev Aleksandrovich our best wishes for good health and many years of fruitful activity for the good of our Homeland.

A.Ya. Pshenichnyy, N.N. Romanov

PETR ALEKSANDROVICH REBINDER

from Maslo-Zhir. Prom., (Oil-Fat Industry) No. 12, 1958.

Petr Aleksandrovich Rebinder is an academician and a great scientist. Through his works he has created and is continuing to develop the theory of the detergent action of superficially active matter.

Working for many years in collaboration with the staff of VNIIZh and its affiliates, P.A. Rebinder developed and helped perfect the production of emulsifiers and food emulsions, types I and II.

As a result of the creative cooperation between Petr Aleksandrovich the Institute of Physical Chemistry of the Academy of Sciences USSR and the personnel of the fat combine imeni Vakhitov, technological processes for the production of specialized soaps have been studied, theoretically substantiated and successfully applied in industry.

In addition to his vast creative work Petr Aleksandrovich has, for 35 years, been engaged in extensive pedagogical activities training highly qualified specialists having a broad qualification profile.

On the occasion of the 60th anniversary of P.A. Rebinder and in recognition of his merit in the sphere of the physico-chemical science, the government has awarded him the Order of Labor Red Banner.

CEREMONY IN HONOR OF PROFESSOR Sh. T. TALIPOV

from Uzbekskiy Khim. Zhurnal, (Uzbek Chemical Journal)  
No. 4, 1958.

On 14 June 1958 the associates of the Central Asian State University imeni V.I. Lenin celebrated the 50th birthday and the 25th anniversary of the scientific, pedagogical and public activity of the Dean of the University chemistry faculty, Professor Shukur Talipovich Talipov, Doctor of Chemical Sciences.

Shukur Talipovich was born in a family of peasant farm workers in the city of Yang'-Yul. Having lost his parents at an early age, he studied from 1920 to 1924 in a boarding school and thereafter until 1928 at the Kazakh Institute of Education. Talipov graduated in 1935 from the chemistry faculty of the Central Asian University in the chair of analytical chemistry and remained there as a teacher.

The future scientist began his professional activity in 1934. Throughout this time he gave a number of courses on analytical chemistry and hydro-chemistry for students of the faculties of chemistry and geography, as well as special courses which he taught in both the Uzbek and Russian languages. His courses were attended by hundreds of students of various faculties.

During the period 1935-1938, the young specialist was assigned to Moscow for completion of his candidate's dissertation under the guidance of corresponding member of the Academy of Sciences USSR, Prof. I.V. Tananayev, Doctor of Chemical Sciences. The dissertation which dealt with the study of fluorine compounds and their utilization in chemical analysis, was presented successfully in 1938 at the Institute of Inorganic and General Chemistry of the Academy of Sciences USSR where Talipov was doing extensive research work at this time on one of the most important natural fluoric compounds, cryolite. This dissertation made it possible to change the formula of cryolite to which an erroneous chemical composition had heretofore been ascribed. (This fact is now recognized not only by chemists but also by geologists and mineralogists); it also made possible the development of a new method of determining aluminium in cryolite form which has been widely adopted in the industrial laboratories of the greatest metallurgical plants and scientific institutions; it has made it possible to postulate a new method for separating beryllium from aluminium. This portion of his work has been developed in a number of laboratories of the Union.

It has served as a foundation for a great many effective methods of analysis.

Since 1938 Shukur Talipovich has occupied the chair of analytical chemistry of Central Asian State University. Here he has been doing research on the chemistry of fluorine and fluoric compounds, associating young specialists in this work. As a result, 12 of Shukur Talipovich's pupils and aspirants, many of whom are of local nationality, have submitted candidate dissertations and are presently independently in the scientific and pedagogical fields. The subject of the doctoral dissertation which Sh. T. Talipov successfully submitted in 1948 at the meeting of the Scientific Council of the Institute of Inorganic and General Chemistry of the Academy of Sciences USSR was the broad scientific research carried out in this chair of the university. In 1949 he was awarded the degree of Doctor of Chemical Sciences and the title of professor. The area of subjects dealt with by the scientist in his doctoral dissertation was very broad. The most important of them are as follows: the elaboration of a scientific classification of the types of chemical reactions involving the participation of fluorides thus enabling accurate prognoses to be made on the orientation of reaction in the formation of fluorides and on their composition, a field of study formerly governed by empiricism; the study of bichromate of fluorine and of alkal; metals leading to the elaboration of new methods of determining chrome and separating it from other elements; the study of bifluoric aluminium with alkal metals making it possible to elaborate a new method of determining metals, particularly sodium and potassium.

The scientific studies of Prof. Sh. T. Talipov on the chemistry of fluorine compounds are vast and manifold in scope. At the present time, research is being conducted on the solubility of fluorides of double and triple component systems in aqueous and non-aqueous media, a great deal of factual material has been accumulated serving as the basis for the elaboration of a great many new, accelerated analysis methods for a number of elements in the periodic system and for the raw material of superphosphate, metallurgical and other factories.

New, independent, scientific trends have been created in the chair of analytical chemistry: 1) the study of the rare elements of cesium, chrome, ruthenium, germanium and others, and 2) the elaboration of new methods of physico-chemical analysis. The results of this research by Sh. T. Talipov and his associates were published in 70 articles widely known here in the Union and abroad.

Prof. Talipov's merit lies not only in the fact that he created a new trend in chemistry, organized his school with the association of many disciples, but also in the fact that he ably combines extensive creative work with pedagogical administrative and public activities. In his capacity as Dean, he has, for 15 years, been successfully directing the overall activity of the faculty and enjoys the well-deserved esteem of both the teaching and technical staff as well as of the students.

Sh. T. Talipov has, on many occasions, been elected to membership in the university party committee and the first party bureau of the chemistry faculty. He has shown himself to be a good organizer and leader.

From 1947 to 1952, Shukur Talipovich directed the laboratory of analytical chemistry of the Chemistry Institute of the Academy of Sciences UzSSR and during this period he trained several candidates of science: He has maintained his connection with the Chemistry Institute up to the present time, for he is a member of the Joint Scientific Council of the Institute and also directs the work of graduate students. The fruitful scientific, pedagogical and public activities of Shukur Talipovich Talipov have been held in high esteem by Party and Government. He has been awarded the "Badge of Honor", the medal "For valorous work during World War II", and six certificates of honor of the Supreme Soviet Uzbek SSR.

The chemistry faculty and the entire University can be proud of their protege, a remarkable organizer, an erudite scientist, a noteworthy figure in analytical chemistry in the Union, especially in Central Asia.

We should like to observe that the career of Shukur Talipovich Talipov, like that of many representatives of the Soviet intelligentsia has been the result of the great solicitude of the Communist Party and the Soviet Government which surrounds every citizen of the Soviet Union.

K. S. Akhmedov

NIKOLAY VASIL'YEVICH ROMENSKIY  
(on the 40th anniversary of his scientific,  
pedagogical and public activity)  
from Mukh.-Elevator. Prom. (Flour Elevator Industry) No. 12,  
1958.

18 December 1958 marked the 40th anniversary of the scientific, pedagogical and public activity of the director of the chair of cereal biochemistry of Odessa Technological Institute imeni I. V. Stalin, Professor Nikolay Vasil'yevich Romenskiy, Doctor of Biological Sciences.

Nikolay Vasil'yevich was born on 15 December 1894 of a peasant family in the village of Grigoryevok in Taganrog-skii Rayon of Rostovskaya Oblast. In 1917 he graduated from the natural science department of the physico-mathematics faculty of Leningrad University.

Up to 1923, Nikolay Vasil'yevich worked as a teacher of chemistry and natural sciences in the secondary schools of the city of Novocherkassk. From 1923 to 1930 he taught organic and analytical chemistry and special chemistry courses in the Novocherkassk technical schools. At the same time, he worked in the industrial and research laboratories of the Don Polytechnical Institute.

In 1930 Nikolay Vasil'yevich held the post of senior assistant in the chair of bio-chemistry of the North Caucasian Veterinary Institute (Novocherkassk) and in January 1931, he became head of this chair. During this same period he was awarded the title of docent. In June 1937 he successfully submitted a doctoral dissertation by which he acquired the degree of Doctor of Biological Sciences and the title of professor in chair of biochemistry.

During World War II, Nikolay Vasil'yevich voluntarily enlisted in a raider battalion and participated in the partisan movement. In 1943, he worked on the reconstruction of industry in Novocherkassk, which had been destroyed by the German fascist occupants.

From September 1949 to the present time, Nikolay Vasil'yevich has directed the chair of biochemistry of grain of Odessa Technological Institute imeni I.V. Stalin.

Nikolay Vasil'yevich has written more than 60 works of great theoretical and practical importance: "Question of the chemical characterization of protein in certain cereals", "Chemical composition of the wheat grain and of its anatomical components as related to certain aspects of the development of the Soviet flour and groat milling industry", "Technological and biochemical properties of wheat grains in the Southern Ukraine", "Biochemical properties of certain corn hybrids as related to the technology of their processing", and others.

In the 40 years of his scientific and pedagogical activity, Nikolay Vasil'yevich has trained a great number of specialists, many of whom have, under his guidance, submitted candidate and doctoral dissertations and occupy posts of leadership in important enterprises and organizations or teach in scientific research institutes and laboratories.

N.V. Romenskiy participates actively in public affairs. He was a member of the board of the Novocherkassk department of the All-Union Chemical Society imeni D.I. Mendeleyev, a member of the Bureau of the Southern RSFSR Affiliate of the All-Union Society of Physiologists and Pharmacologists, and a member of the board of the department of the scientific research society of the flour groats milling industry and Grain Elevator Management, and others.

In recognition of his great scientific, pedagogical, and public activities, Nikolay Vasil'yevich has been awarded the "Badge of Honor", and the medals, "Partisan of the Second World War, 2nd Degree", and "For Valorous Work during the Second World War 1941-1945".

On the occasion of the 40th anniversary of the scientific pedagogical and public activities of N.V. Romenskiy, his many pupils and friends extend to him their sincere wishes for long life and continued fruitful activity.

A. Dil', N. Charugina, A. Borodin, P. Solodovnik, I. Sklyar, N. Solovkin, G. Potapov, N. Ponomarev, I. Aleksin, K. Solomentsev, N. Topylin, M. Skorovarov, S. Karabanov, N. Bogdanov, P. Stryukov.

VLADIMIR NIKOLAYEVICH SEMEVSKIY  
(on his 60th birthday)  
from Gornyy Zhurnal (Mining Journal) No. 12, 1958.

October 1958 marked the sixtieth anniversary and thirty years of engineering and scientific activity of Vladimir Nikolayevich Semevskiy, Doctor of Technical Sciences and professor at Leningrad Mining Institute.

V.N. Semevskiy was born on 14 October 1898. After serving in the Red Army (1918-1922) he entered the Moscow Mining Academy and after graduation (in October 1927) he worked in the coal basin of the Moscow region.

From 1929 to 1934 V.N. Semevskiy worked in the copper mines of the Transcaucasus as head of the pit imeni Lenin (Alaverda), head of the great Zaktsvetmet mining trust (Tbilisi), and as chief engineer of a copper combine (Alaverda). In 1934, he transferred to the Lipets iron mines and thereafter to the Tula iron mines and in 1937 he entered the Glavmed' NKTsM.

In 1944 Vladimir Nikolayevich worked in planning organizations, first in the Giprotsvetmet (Moscow), thereafter in the Gipronikel (Leningrad) from where he transferred in 1952 to teaching work in Leningrad Mining Institute at the chair of construction of mining enterprises. From December 1956 to the present time Vladimir Nikolayevich has been dean of the Mine Construction Faculty of Leningrad Mining Institute.

In 1944 Vladimir Nikolayevich Semevskiy became special editor of "Gornyy Zhurnal" (Mining Journal) and in 1947 became an active member of its Editorial Board, performing the scientific editing of articles with great competence and great editorial skill.

Vladimir Nikolayevich also carries on public activity as a member of the board of the Leningradskaya Oblast division of the All-Union Mining Society.

Beginning in 1936, V.N. Semevskiy's articles appeared regularly in specialized magazines. These articles dealt chiefly with the working of ore deposits. In 1949, his monograph "Open-face mine" (working of sloping beds of metal ores) was published and the monograph "Bar timbering", the first synthesis in world literature on the utilization of bar timbering, appeared in 1956.

In 1946 V.N. Semevskiy submitted his candidate's dissertation and in 1955, his doctoral dissertation. In 1957 he was awarded the title of professor.

Vladimir Nikolayevich successfully combines teaching and scientific research with great and successful efforts to introduce bar timbering into various sectors of the mining industry.

All those engaged in the mining industry and in mining science wish Vladimir Nikolayevich Semevskiy further fruitful accomplishment for the welfare of our beloved Homeland.

VIKTOR AMAZASPOVICH AMBARTSUMYAN  
(on his 50th birthday)

from Izv. AN ArSSR: Sobshch. Byurakanskoy Obs. (News of the  
Academy of Sciences ArSSR: report of Byurakan Observatory)  
1958.

18 September 1958 marks the 50th anniversary of the  
great astrophysicist, founder and director of Byurakan Ob-  
servatory, academician, V.A. Ambartsumyan.

V.A. Ambartsumyan was born in the city of Tbilisi in  
the family of the very learned philologist-writer and peda-  
gogue A.A. Ambartsumyan, who, having noted his son's extra-  
ordinary mathematical endowments ably and carefully super-  
vised his upbringing and education which, subsequently, was  
to play a significant role in the formation of V.A. Ambart-  
sumyan's scientific interests and talent.

V.A. Ambartsumyan obtained his secondary education in  
Tbilisi and continued his studies at Leningrad State Univer-  
sity (LGU) where his first scientific efforts were manifested.  
As a university student, he published more than 10 studies  
dealing with a wide range of subjects relating to theoretical  
astrophysics and mathematics.

In 1928 after graduating brilliantly from the univer-  
sity with the qualifications of an astronomer, V.A. Ambart-  
sumyan enrolled in graduate studies at Pulkovo Observatory,  
where he studied and worked under the guidance of the eminent  
Russian astrophysicist, academician A.A. Belopol'skiy.  
During his years at the Pulkovo Observatory, V.A. Ambartsum-  
yan conducted and published a number of important studies  
dealing with solar physics, physics of the stellar atmospheres  
and gaseous dark spots and individual questions of theoretical  
physics.

Upon completion of his graduate studies in 1931, V.A.  
Ambartsumyan was invited to work at Leningrad State Univer-  
sity where he served as a docent, and in 1934, after receiving  
the title of professor, he occupied the post of head of the  
chair of astrophysics which he had established. Beginning in  
1938, V.A. Ambartsumyan simultaneously held the post of direc-  
tor of the LGU astronomical observatory.

The scientific activity of V.A. Ambartsumyan during  
his early years at LGU was marked by brilliant achievements  
in the field of research in stellar physics and gaseous dark  
spots. Ambartsumyan has given a mathematical interpretation  
of the complex physical processes involved in the lumine-  
scence of gaseous dark spots, he has demonstrated the great  
role of  $L_\alpha$  radiation pressure in the dark spots, and has

developed a solution to the problem of atom accumulation in metastable states and elaborated a method for determining the electronic temperature of the dark spots, etc. The method he elaborated for subdividing the  $L_A$  and  $L_C$  fields of radiation has enabled him to devise a theory of ray equilibrium of planetary dark spots which has been the foundation for all subsequent studies in this direction, the most valuable of which is the research conducted by V.A. Ambartsumyan's student, the outstanding astro-physicist and corresponding member of the Academy of Sciences USSR, V.V. Sobolev.

In addition to this, V. A. Ambartsumyan has devised methods of determining the masses of the dark spots and the gaseous envelopes surrounding the stars. These methods are very widely used at the present time.

The aforementioned studies subsequently stimulated broad research on stellar physics and dark spots both here in the Soviet Union as well as abroad and they have constituted a very significant adjunct to the formation of a new scientific discipline, that of theoretical astrophysics. V.A. Ambartsumyan was the first in the Soviet Union and one of the first in the world to have organized a course on theoretical astrophysics and he introduced it into the curriculum of the LGU. V.A. Ambartsumyan is indeed the head of the Soviet school of astro-physical theorists and all the great specialists in this field have, in varying degrees, experienced his beneficial influence.

Subsequently, V.A. Ambartsumyan's sphere of interests broadened appreciably and covered, in addition to astrophysics, questions of stellar astronomy and cosmogony. Thus, for example, a large number of his studies deal with the problem of the development of stellar systems. The idea underlying these studies is that of the existence in real stellar systems of irregular forces in addition to regular forces. These irregular forces often, for example, in the case of visible stars and star clusters, play a decisive role in the process of their development. In order to solve this problem, V.A. Ambartsumyan elaborated new methods of statistical mechanics of stellar systems and successfully applied them to dual stars and star clusters. These methods of studying the evolution of stellar systems were subsequently widely utilized and developed in the research of a large number of scientists.

It should be noted that the lectures and reports on the statistical mechanics of stellar systems given by V.A. Ambartsumyan during the 1930's at Leningrad University which contained a systematic presentation of his ideas have remained unpublished. Only part of the findings obtained were subsequently printed in the form of highly condensed articles.

The results of the above-mentioned research of V.A. Ambartsumyan, together with other findings mainly concerning non-stationary stars, radically modified the heretofore existing conception of the age of the Galaxy and of the evolution of its component systems. He refuted the "Long time scale", according to which, the age of the Galaxy was taken to be roughly  $10^{13}$  years, while according to V.A. Ambartsumyan, the age of the Galaxy is in the order of  $10^{10}$  years. At first, this finding called forth obstinate objections on the part of many astronomers. Subsequent studies, however, fully confirmed the short scale.

The aforementioned astro-physical and stellar dynamic studies brought V.A. Ambartsumyan world renown and established his tremendous scientific authority. In 1939, he was elected a correspondent member of the Academy of Sciences USSR.

In 1941 V.A. Ambartsumyan was appointed pro-rector of LGU for science. During World War II, he was placed at the head of the LGU affiliate which had been evacuated to the city of Yelabuga and which was composed of the scientific research laboratories of the university. Under his guidance, the personnel staff of the affiliate carried out a great deal of valuable scientific studies of importance for the country's defense and economy which have been widely utilized. During 1941-1943, V.A. Ambartsumyan personally conducted vast research on the theory of light diffusion in a turbid medium, which is of great importance in many questions of geophysics, physics and astro-physics. This traditionally well-known problem in science has generally been reduced to an integral equation for which the solution was found in a very cumbersome fashion by means of consecutive approximations. V.A. Ambartsumyan applied an entirely new method to the solution of this problem. By reducing the problem of light diffusion to simple functional equations, he obtained an elegant and exact solution to it. These equations have been incorporated in science under the designation "Ambartsumyan's functional equations".

In 1943, V.A. Ambartsumyan was invited to Armenia upon the occasion of his election as an active member and vice-president of the recently organized Academy of Sciences ArSSR. Beginning in 1944, he simultaneously occupied the post of director of the Yerevan astronomical observatory and the chair of astro-physics of Yerevan State University. On the initiative of V.A. Ambartsumyan, work was begun in 1946 on the construction of an astro-physical observatory in Byurakan.

During this period V.A. Ambartsumyan completed a cycle of studies dealing with the problem of the formation of the Galaxy which had been partially carried out during his stay in Leningrad.

After it had been established in the 1930's that a dark light-absorbing matter existed in the inter-stellar space, the basic problem of modern astronomy -- the formation of the Galaxy -- became markedly complex. The necessity emerged for research into the nature of this matter and on the elaboration of a method of estimating its influence on the findings obtained from observation.

V.A. Ambartsumyan together with Sh.G. Gordeladze, while studying the distribution of burning stars and of diffuse dark spots revealed the ragged structure of the dark inter-stellar matter and drew the conclusion that the inter-stellar absorption was conditioned by the total mass of dark clouds. This was of vital importance for subsequent studies on the formation of the Galaxy. More particularly, on the basis of the ragged structure of the dark matter, V.A. Ambartsumyan elaborated a mathematical theory of the fluctuations in the distribution of stars, of the brilliance of the Milky Way of the non-galactic dark spots which was subsequently developed in the work of Ambartsumyan's pupils and by a number of foreign scientists (Chandrasekar, Munch and others). An essentially new orientation for research on the formation of the Galaxy was created by these studies.

A number of other valuable studies of V.A. Ambartsumyan also relate to the problem of the formation of the Galaxy, among which his theory for determining the distribution of the spatial speeds of stars according to their ray speeds is worthy of special note.

V.A. Ambartsumyan's studies on the problem of the origins and development of celestial bodies -- one of the most interesting yet most complex problems of natural science marks a new, most significant milestone in his scientific activity.

A profound analysis and synthesis of material accumulated from observation enabled him in 1947 to discover the existence, in the Galaxy group, of a new type of stellar system which he designated as stellar associations. V.A. Ambartsumyan established the fundamental fact of the continuous process of star formation at the present stage in the development of the Galaxy. This was a refutation of the then generally recognized concept in the West of the simultaneous origin of the stars in the Galaxy. Furthermore, many purely speculative attempts to solve the problem of the evolution of stars and of stellar systems lost their significance. In fact, for the first time in the history of astronomy research into this problem acquired a material foundation -- it became possible to carry on research into the evolution of stars and stellar systems by observation and study of stars and stellar systems at various stages of their development.

A finding of utmost value for the cosmogony of the stars was the discovery of the group character of the emergence of stars. In the light of V.A. Ambartsumyan's new conception of the origins of stars, the physical nature and cosmogonic role of divisible stars, of star chains and clusters and also of gaseous dark spots gradually became more apparent. The studies conducted at the Byurakan astro-physical observatory of star associations under V.A. Ambartsumyan's direction led to an entire series of extremely valuable conclusions concerning the evolution of stars and star systems.

The discovery and the first conclusions of the research on star associations drew the attention of astronomers throughout the world and gave rise to broad research in this direction in many astronomical institutions of the world. By this outstanding discovery, V.A. Ambartsumyan had, in fact, laid the foundation for a new trend in cosmogony which, judging from the results obtained from the studies under way, has proven to be extremely fruitful.

As a matter of curiosity, the theoretical prediction (in 1949) of V.A. Ambartsumyan concerning the dynamic instability of star association and their expansion was brilliantly confirmed as a result of the analysis of star movements of a number of points carried out in Leyden and Byurakan. This fact bears witness to the great scientific intuition and the depth of the scientific prediction of V.A. Ambartsumyan.

At the present time, the phenomenon of the expansion of star associations has served as a basis for a widely utilized method of determining the age of a number of types of stellar systems and of the stars themselves.

It is noteworthy that the theory of star associations stimulated general study of the physical nature of their component bodies. Among the many studies conducted in this direction particular attention should be given to V.A. Ambartsumyan's work on the phenomenon of uninterrupted emission, that is, excess radiation in a solid spectrum observed in stars of the T. Taurus and UV Whale type and also in comet dark spots. By synthesis and analysis of uncoordinated data, V.A. Ambartsumyan established the non-thermal character of uninterrupted emission. This aroused great interest as an entirely new physical phenomenon calling for further study to ascertain its origin. At the present time, extensive study of this phenomenon is under way both at the Byurakan observatory as well as at a number of foreign observatories (Lik, Tonanttsintla, and others).

In recent years V.A. Ambartsumyan began research on the galaxies and on the systems constituted by them. His

views on the origin and development of galaxies which are based on the conclusions he obtained from analysis of observation data, deserve particular attention. V.A. Ambartsumyan's conclusion concerning the group character of the emergence of galaxies should be considered as fundamental,: galaxies emerge in the form of divisible systems and clusters having in many cases positive energy, that is, constituting systems under disintegration.

There is great interest in the interpretation given by V.A. Ambartsumyan of radiogalaxies as the result of a process of division -- the emergence of galaxies counterbalancing the hypothesis of collision of galaxies. The azure extra-galactic points detected by him, which, in fact, constitute a particular kind of dwarf galaxies, enrich our conceptions of the nature of galaxies and perhaps may furnish much valuable material for studying the evolution of extra-galactic points. V.A. Ambartsumyan is at present conducting research in this direction and there can be no doubt that, this time just as always, the cycle of his studies will end with the solution to a number of cardinal elements of this problem.

It is difficult in a single article to cover, and all the more so, to fully describe the many outstanding studies of V.A. Ambartsumyan which are remarkable for their originality and depth of conception and which have stimulated to a significant extent the development of world science. We merely wished to briefly note the basic milestones of his creative endeavors which have laid the foundation for a number of new scientific trends which are continuing to develop very intensively.

V.A. Ambartsumyan combines in remarkably able fashion his scientific activity with pedagogic, organizational and public activity. For more than 25 years he has held the chair of astro-physics, first at LGU and thereafter at YeGU. During this period he taught and trained a great many highly qualified astro-physicists. Many of his students who now work in various cities of the Soviet Union (Moscow, Leningrad, Kiev, Baku, Tbilisi-Abastumani, Yerevan-Byurakan, etc.) have been awarded the degrees of candidates and doctors of sciences and have already become well-known scientists.

V.A. Ambartsumyan's work in organizing and directing the activity of the institutions under his authority is particularly meritorious. A shining example of this is afforded by the Byurakan astro-physical observatory which he founded and which, thanks to V.A. Ambartsumyan's energetic efforts and ability has, in an exceptionally short space of time, come to the fore among the most modern astro-physical institutions. In 1947, V.A. Ambartsumyan was elected president of the Academy of Sciences ArSSR. In this responsible post he

is applying all his efforts and knowledge to strengthen and expand the Academy and its scientific institutions and to the cause of developing Soviet science.

The most recent period of V.A. Ambartsumyan's activity has been marked by the further growth of his scientific authority and general recognition of his scientific works. In 1953, he was elected active member of the Academy of Sciences USSR. He has become honorary member and correspondent member of the academies and scientific societies of many foreign countries (Austria, Britain, Belgium, Germany, United States, etc.). He was vice-president of the International Astronomical Association and frequently participated in the work of international congresses, conferences and meetings.

The manifold scientific activity of V.A. Ambartsumyan is combined with his extensive public activity. He is a deputy of the Supreme Soviet USSR and a member of the Central Committee of the Communist Party of Armenia and president of the Armenian society for the propagation of scientific and political knowledge.

The Soviet government has highly valued the scientific and public activity of V.A. Ambartsumyan and has awarded him the Order of Lenin, two Orders of Labor Red Banner and medals. The Stalin Prize was awarded twice for his scientific studies.

V.A. Ambartsumyan's scientific capacities are in full development. He will accomplish still more for the advancement of Soviet science and for the people of which he is a worthy son.

On the occasion of Viktor Amazaspovich Ambartsumyan's fiftieth birthday all his students and colleagues extend to him their best wishes for health, long life and further scientific successes.

YULIYA MARKOVNA GEFTER  
(on her 70th birthday and 50th anniversary  
of her scientific, pedagogical activity)  
from Voprosy Medits. Khim (Problems of Medical Chemistry),  
No. 1, 1959.

In November 1958 the scientific public of Leningrad and biochemists of many other cities of our country observed the 70th birthday and the 50th anniversary of the scientific, pedagogical activities of Professor Yuliya Markovna Gefter, head of the chair of biochemistry of the First Leningrad Medical Institute.

Yu.M. Gefter belongs to that illustrious pleiade of Russian women who, motivated by a sincere thirst for knowledge and, despite all the difficulties arising on their path at the time of the Tsarist government, were able to obtain a higher education and devote their entire life to science.

Having graduated in 1908 from the Moscow Women's University in the section of natural sciences of the physico-mathematics faculty, Yuliya Markovna began her work in Moscow University in the facultative therapeutic clinic, where she became successively intern, assistant, and head of department and clinic laboratory.

In addition to her work in the medical faculty of MGU (Moscow State University), Yu.M. Gefter worked for several years in the field of organic chemistry under N.D. Zelinskiy.

Her outstanding ability and her enthusiasm for biochemistry brought Yu.M. Gefter to the laboratory of medical chemistry of Moscow State University under the direction of one of the foremost Russian biochemists, V.S. Gulevich. Yuliya Markovna remained here from 1920 to 1931, first as a privat-docent and thereafter as docent of the department of biological chemistry of the Moscow State University medical faculty.

After having served Moscow University for more than 20 years, Yu.M. Gefter transferred in 1931 to the First Leningrad Medical Institute where she occupied the post of head of the chair of biochemistry, which she continues to hold up to the present.

The scientific interests of Yu.M. Gefter are chiefly concentrated on the study of tissue metabolism under various normal and pathological conditions. In her work as well as in the work of her pupils, scientific experimentations has always been harmoniously associated with the practical needs of Soviet health. Thus, under her direction, studies were made of the norms for workers' nutrition in various occupations

and, during the years of the Second World War, studies were conducted on the metabolic variations occurring under nutritional dystrophy.

Professor Yu.M. Gefter is not only a brilliant, highly erudite scientist but also a remarkable pedagogue. Dozens of doctors and scientific workers are indebted to her for the thorough knowledge they have acquired in the field of biochemistry and for their experimental skill.

Yu.M. Gefter has personally published 88 scientific works. More than 150 studies have been published by the laboratories under her direction; 26 of these studies are candidate dissertations and two are doctoral dissertations.

Professor Yu.M. Gefter has done and is presently doing a great deal of organizational and advisory work in the field of biochemistry. A considerable number of institutions in Leningrad -- the biochemical laboratories of the Institute of Occupational Diseases, the State Institute for the Advanced Training of Physicians, the Scientific Research Institute of Blood Transfusion, the Institute of First Aid, and many others -- avail themselves of the constant assistance of Yuliya Markovna in the analysis and treatment of biochemical problems.

Yu.M. Gefter is a member of the editorial staff of the chemistry section of the *Bol'shaya Meditsinskaya En siklopediya* and a member of the editorial council of the journals "Voprosy Meditsinskoy Khimii" (Problems of Medical Chemistry) and "Laboratornoye Delo" (Laboratory Affairs).

Yu.M. Gefter's merits have been highly esteemed by the government of the Soviet Union, which has conferred upon her the Order of Lenin.

A great scientist and pedagogue, Yuliya Markovna Gefter is noted for her modesty and her extroadinray kindness not only towards her close collaborators but towards all those around her.

The editorial staff of the journal "Voprosy Meditsinskoy Khimii" extends their warm congratulations to Yuliya Markovna and wish her good health and further success in her manifold activities.

A. M. DRUZHININ  
(on his 60th birthday)  
from Zhurnal Nevropat i Psikh. (Journal of Neuropathology  
and Psychiatry), No. 1, 1959.

Sixty years have passed since the birth of the distinguished physician of the RSFSR, Aleksander Mikhailovich Druzhinin, whose name is associated with the organization of psychiatric care in Ivanovskaya Oblast. On his initiative, the following services were created and subsequently developed: the oblast psychoneurological dispensary, the oblast psychiatric hospital "Zinovo" and the "Klement'yevo" colony, all of which Aleksander Mikhailovich directed for many years and where, under his guidance, the most up-to-date methods of treating psychiatric patients are applied.

In his capacity as oblast psychiatrist, A.M. Druzhinin is carrying on active work in training psychiatrists.

A.M. Druzhinin has submitted more than 50 scientific reports at oblast and inter-oblast conferences and congresses, and published a number of works.

As a deputy since 1947 of the rayon and at present of the city soviet, A.M. Druzhinin has headed the standing commission of public health.

A.M. Druzhinin has been awarded the Orders of Lenin, the Order of Labor Red Banner the "Badge of Honor" and medals. The title of 'Distinguished Physician of the RSFSR' has been conferred on him.

We extend to Aleksander Mikhailovich our best wishes for good health and professional success.

MIKHAIL PAVLOVICH KUTANIN  
(on his 75th birthday and 35th year of  
scientific and pedagogical activity)  
from Zhurnal Nevropat. i Psikh. (Journal of Neuropathology  
and Psychiatry) No. 1, 1959.

June 1958 marked the 75th anniversary of the eminent Soviet psychiatrist-clinician, Mikhail Pavlovich Kutanin, a disciple of the Korsakov school of Russian psychiatrists.

After enrolling in the natural science faculty of Moscow University in 1902, Mikhail Pavlovich transferred to the medical faculty; in addition, he also graduated from the university chemical department in 1907 under Zelinskiy.

In 1910 M.P. Kutanin passed the doctoral examinations in Berlin where he was engaged in research on the chemistry of the brain under Tirfelder and on comparative anatomy under Zion. In the same year, he published a doctoral dissertation on the chemical composition of the brain in various animals and in human beings.

After working for a certain time as extern under V.P. Serbskiy, Dr. Kutanin became, in 1911, intern of the Moscow Psychiatric Clinic imeni S.S. Korsakov and shortly thereafter he obtained the post of assistant.

The first scientific works of Mikhail Pavlovich Kutanin were devoted to the chemistry of the brain (report submitted at the congress of psychiatrists in 1911) and the histology of the hypothalamus.

He subsequently became interested in clinical problems of schizophrenia, narcomania (cocaine and heroin addictions, et alia).

In 1913, M.P. Kutanin published his monograph "Schizophrenia according to Bleuler". This work furthered the familiarity of a whole generation of psychiatrists with this widespread disease.

In 1920, Dr. Kutanin, who was an active member of the neuro-psychiatric section of the Peoples' Commissarist of Health organized, with the collaboration of P.P. Kashchenko, L.A. Prozorov and M.Ya. Seriyskiy, the evacuation of psychiatric casualties from the front. Upon his mobilization, Dr. Kutanin was appointed chief of out-patient services of the Caucasian front and, in July of that year, he was designated as director of the Saratov psychiatric hospital.

Parallel with extensive active organizational work during that period, Dr. Kutanin continued his scientific research activities.

In 1923 he obtained the chair of psychiatry in the medical faculty of Saratov University which he heads to the present time -- throughout 35 years.

Dr. Kutánin is an experienced clinician; patients come to his clinic from all corners of our country. He enjoys the affection of young people. His courses generally attract a numerous audience, not only of medical students but also of representatives of other institutes.

Keeping abreast of advanced trends in world psychiatry, Mikhail Pavlovich brings to science everything of the greatest value.

The studies of M.P. Kutanin on various problems, primarily of clinical and organizational psychiatry, deal with the genesis of schizophrenia, its early symptoms, psychopathy, psycho-hygiene and its psycho-prophylaxis. He has published more than 100 original studies.

Viewing psychiatry as a social science, Mikhail Pavlovich maintains close contact with jurists, pedagogues, and artists.

A brilliant speaker, he has been tirelessly disseminating knowledge of natural sciences and medicine among various walks of the population since 1908.

Mikhail Pavlovich is considered a brilliant, perceptive physician, an outstanding scientist and social worker and organizer of an entire network of psychiatric services in Saratov.

DAVID GRIGOR'YEVICH SHEFER  
(on his 60th birthday)

from Zhurnal Nevropat. i Psikh. (Journal of Neuropathology and Psychiatry) No. 1, 1959.

1 December 1958 marked the 60th anniversary of the outstanding Soviet neuropathologist and neurosurgeon, Prof. David Grigor'yevich Shefer.

As a brilliant clinician of broad vision and great erudition as well as a talented pedagogue, Dr. Shefer is one of the organizers of neurology and neurosurgery in the Urals.

Upon his graduation in 1922 from the medical faculty of Saratov University, Dr. Shefer worked in the clinic for nervous diseases of Astrakhan Medical Institute and in the Rostov clinic of nervous diseases and neurosurgery from 1925 to 1937.

In 1936, D.G. Shefer submitted a doctoral dissertation on the subject "X-Rays and the central nervous system" and in 1937 he was appointed head of the chair of nervous diseases and neurosurgery of Sverdlovsk Medical Institute, which he directs to the present time. At the same time he has served for a number of years, as scientific director of the Sverdlovsk Institute of Physiotherapy and Health Resort Science.

David Grigor'yevich is the author of 135 scientific works including two monographs. Among these works his studies on the neuro-oncology of the cerebrum and spinal cord and the diagnosis of cerebral tumors are particularly noteworthy.

D.G. Shefer has published a voluminous work on osteomyelitis of the cranium in which he has given an original classification of osteomyelitis and elucidated the methodology of neurosurgical intervention. He has exhaustively described the methodology of operative intervention on cerebral ventricles in skull injuries; he has described the bone morbidity symptom in closed trauma of the skull and the clinic and methodology of surgical intervention in blind wounds of the skull and brain. Great attention is given to clinical questions and to the methodology of surgical treatment of traumatic abcesses of the brain, to the study of vegetative symptomatology and to the problem of reflex contracture. In the clinic for traumatic lesions of the brain, on the basis of numerous observations, detailed clinical studies and individual results, D.G. Shefer has pronounced himself in favor of early intervention. With respect to injuries of the nerve trunks D.G. Shefer, together with M.E. Kolik, has set forth all his rich clinical and neurosurgical experience in a book entitled "Diagnosis and Treatment of Injuries of the Peripheral Nerves," published in 1944.

The experimental studies of D.G. Shefer on the influence of X-Rays on the cellular elements and stroma of cerebral and spinal cord tumors are of great interest; his work on the influence of X-Rays on the formation of cerebral fluid and on the vascular plexus is important in the treatment of hydrocephalus and liquorhreas.

D.G. Shefer has given a great deal of attention to the study of neuroinfections, diseases of the nervous system accompanying malaria, brucellosis, and typhoid fever, and peculiarities of neuroinfections in the Urals. The Sverdlovsk clinic of nervous diseases was one of the first in the Union to have ascertained a direct link between Kozhevnikov's epilepsy and summer-spring encephalitis. David Grigor'yevich has studied in a number of his works the vegetative nervous system, particularly the pathology of the diencephalic region. His study on the diagnostic significance and mechanism of the occurrence and formation of ultra-violet erythemas is of particular interest.

In recent years D.G. Shefer and his co-workers have been studying the problem of cerebro-vascular diseases and their treatment by anticoagulants.

D.G. Shefer applies a constructive approach to the solution of any problem. A distinctive feature of his scientific activity is his constant association of theory and practice.

The training of scientific personnel is a matter of daily concern for David Grigor'yevich. Under his guidance, four doctoral and 22 candidates' dissertations have been prepared. He has trained more than forty interns. The personnel of the clinic which he directs has published more than 300 scientific works and edited four digests.

The courses given by D.G. Shefer, which demonstrates his extraordinary pedagogical talent, are exceedingly popular.

David Grigor'yevich conducts considerable public activity. He heads the board of the Sverdlovsk Society of Neuro-pathologists, Psychiatrists, and Neurosurgeons and serves as a member of the board of two all-Union societies and one all-Russian society, that of neurosurgeons, neuropathologists, and psychiatrists, and also a member of the editorial councils of three Union-wide scientific journals, co-editor of the *Bol'shaya Meditsinskaya Entsiklopediya*, and a co-author of a multi-volume textbook on neurology.

In 1956, D.G. Shefer was elected to membership in the Sverdlovskaya Oblast committee of the Union of Medical and Sanitation Workers.

The government has highly esteemed D.G. Shefer's merits and awarded him two orders and medals.

The neuropathologists and neurosurgeons of our country warmly congratulate David Gregor'yevich Shefer on his glorious jubilee and wish him health and strength for new success in his scientific and medical activity for the welfare of our great Homeland.

FILIIPP DANILOVICH PASHCHENKO  
(on his 60th birthday and the 40th anniversary  
of his medical activity)  
from Zhurnal Nevr<sup>opat.</sup> i Psikh. (Journal of Neuropathology  
and Psychiatry) No. 1, 1959.

The medical community has observed the 60th birthday and the 40th anniversary of the medical activity of the chief physician of Kiev Psychoneurological Hospital imeni I.P. Pavlov, Filipp Danilovich Pashchenko. From medical assistant to outstanding organizer of Soviet psychiatry -- this is the career of F.D. Pashchenko. At the outset of his administrative activity, he worked at the Poltava Psychiatric Hospital and, beginning in 1936, at the Kiev Psychiatric Hospital. From the very beginning of F.D. Pashchenko's assumption of work at this hospital, its organization drastically improved, active therapy began to be applied more broadly, mortality decreased, laboratories were set up, scientific working conditions were created, contact between sections of the institute's medical service and practitioners became more close.

At the end of the war, F.D. Pashchenko returned to the hospital, which had been destroyed by the fascists. Under his direction, a tremendous reconstruction task was carried out and now the hospital's activity indices are higher than in 1940.

F.D. Pashchenko is noted for his effection for the patients, for his tireless concern about them, as well as for his courtesy to his colleagues, his modesty and his devotion to the cause of psychiatry. He is not only an organizer of psycho-neurological service and a practising physician, but also a scientist, a clinician with a broad sphere of scientific interests. F.D. Pashchenko has written more than 40 scientific studies.

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